

THAT WHICH IS CLAIMED:

1. A method of configuring a wireless base station of a wireless mobile data communications system, the method comprising:

communicating a packet from a node of a packet data network to the wireless base station to configure the wireless base station to use a predetermined address in the packet data network.

2. A method according to Claim 1, wherein communicating a packet from a node of a packet data network to the wireless base station to configure the wireless base station to use a predetermined address in the packet data network comprises:

transmitting a packet including the address in a destination address field thereof;

receiving the transmitted packet at the wireless base station; and
responsive to receipt of the transmitted packet, configuring the wireless base station to treat the address in the destination address field of the received packet as an address assigned to the wireless base station.

3. A method according to Claim 1, further comprising communicating a message to the wireless base station via the node of the packet data network according to a protocol residing above the protocol of the packet data network to assign an identifier to the wireless base station.

4. A method according to 3, wherein the protocol above the packet data network protocol comprises at least one of a transport protocol and a network protocol, and wherein the assigned identifier comprises at least one of a port number and an internet address.

5. A method according to Claim 4, wherein the wireless communications system comprises a Cellular Digital Packet Data (CDPD) system, and wherein the wireless base station comprises a Mobile Data Base Station (MDBS).

6. A method according to Claim 1, wherein the wireless mobile data communications system comprises a Cellular Digital Packet Data (CDPD) system, and wherein the wireless base station comprises a Mobile Data Base Station (MDBS).

7. A method according to Claim 1, wherein the packet comprises one of frame relay frame, a network layer datagram and a transport layer datagram.

5 8. A method of configuring a Mobile Data Base Station (MDBS) of a Cellular Digital Packet Data (CDPD) communications system, the method comprising:

communicating a frame from a frame relay node of a backbone network of the CDPD communications to the MDBS to configure the MDBS to use the Data Link
10 Connection Identifier (DLCI) in the frame as its frame relay address.

9. A method according to Claim 8, wherein communicating a frame from a frame relay node of a backbone network of the CDPD communications system to the MDBS to configure the MDBS to use the Data Link Connection Identifier (DLCI)
15 in the frame as its frame relay address comprises communicating a Local Management Interface (LMI) frame from the frame relay node to the MDBS.

10. A method according to Claim 8, wherein communicating a frame from a frame relay node of a backbone network of the CDPD communications to the
20 MDBS to configure the MDBS to use the Data Link Connection Identifier (DLCI) in the frame as its frame relay address comprises:

receiving the frame at the MDBS; and
configuring a frame relay stack based on the DLCI in the received frame.

25 11. A method according to Claim 8, further comprising:
receiving at least one frame at the MDBS from the frame relay node;
processing the received at least one frame to recover a datagram; and
configuring the MDBS to use at least one of a port number and an internet
address in the received datagram.

30 12. A wireless base station for use in a wireless mobile data communications system, the wireless base station comprising:

a radio communications unit operative to communicate radio signals to and from mobile terminals; and

a mobile data communications interface coupled to the radio communications unit and configured to connect to a node of a packet data network to provide communications between the wireless base station and the wireless communications network, the mobile data communications interface including a self-configuring packet data interface operative, responsive to receipt of a packet from the node of the packet data network, to configure itself to use an address included in the received packet as an address for the wireless base station in the packet data network.

13. A wireless base station according to Claim 12, wherein the self-configuring packet data interface is operative to configure itself to use an address included in a destination field of the received packet as an address for the wireless base station in the packet data network.

14. A wireless base station according to Claim 12, wherein the self-configuring packet data interface comprises a self-configuring frame relay interface operative to receive a frame from a frame relay node connected to the mobile data communications interface and to configure itself to use a Data Link Connection Identifier (DLCI) in the received frame as its frame relay address.

15. A wireless base station according to Claim 12, wherein the mobile data communications interface is operative to process information in a packet received from the node of the packet data network according to a protocol residing above the protocol of the packet data network to assign an identifier to the wireless base station.

16. A wireless base station according to 15, wherein the protocol above the packet data network protocol comprises at least one of a transport protocol and a network protocol, and wherein the assigned identifier comprises at least of a port number and an internet address.

17. A wireless base station according to Claim 16, wherein the wireless mobile data communications system comprises a Cellular Digital Packet Data (CDPD) system, and wherein the wireless base station comprises a Mobile Data Base Station (MDBS).

18. A wireless base station according to Claim 12, wherein the wireless mobile data communications system comprises a Cellular Digital Packet Data (CDPD) system, and wherein the wireless base station comprises a Mobile Data Base Station (MDBS).

19. A wireless base station according to Claim 12, wherein the packet comprises one of frame relay frame, a network layer datagram and a transport layer datagram.

20. A wireless base station for use in a wireless mobile data communications system, the wireless base station comprising:

means for communicating radio signals to and from mobile terminals; and

means, coupled to the means for communicating radio signal, for providing communications between the wireless base station and a node of a packet data communications network of the wireless communications system, the means for providing communications between the wireless base station and the node of the packet data communications network comprising means for configuring itself to use an address included in a received packet as an address for the wireless base station responsive to receipt of the packet from the node of the packet data network.

21. A wireless base station according to Claim 20, wherein the wireless mobile data communications system comprises a Cellular Digital Packet Data (CDPD) system, and wherein the wireless base station comprises a Mobile Data Base Station (MDBS).

22. A wireless base station according to Claim 20, wherein the packet comprises one of frame relay frame, a network layer datagram and a transport layer datagram.

23. A Mobile Data Base Station (MDBS) for a Cellular Digital Packet Data (CDPD) communications system, the MDBS comprising:

a radio communications unit operative to communicate radio signals to and from mobile terminals; and

a mobile data communications interface coupled to the radio communications unit and configured to connect to a frame relay node coupled to a backbone network of the CDPD communications system, the mobile data communications interface including a self-configuring frame relay interface operative, responsive to receipt of a frame from the frame relay node, to configure itself to use a Data Link Connection Identifier (DLCI) in the received frame as a DLCI for the MDBS.

24. An MDBS according to Claim 23, wherein the self-configuring frame relay interface is operative, responsive to receipt of a Local Management Interface (LMI) frame from the frame relay node, to configure itself to use a Data Link Connection Identifier (DLCI) in the received LMI frame as a DLCI for the MDBS.

25. An MDBS according to Claim 23, wherein the self-configuring frame relay interface is operative, responsive to receipt of a frame from the frame relay node, to configure itself to configuring a frame relay stack based on the DLCI in the received frame.

26. An MDBS according to Claim 23, wherein the mobile data communications interface is further operative to process at least one received frame to recover a datagram and to configure itself to use at least one of a port number and an internet address in the received datagram.

27. A computer program product for configuring a wireless base station of a wireless mobile data communications system, the computer program product comprising program code embodiment in a computer-readable storage medium, the computer program code comprising:

program code for providing communications between the wireless base station and a node of a packet data communications network; and

program code for configuring the program code for providing communications between the wireless base station and a node of a packet data communications network the program code to use an address in packet received from the node of the packet data communications network as an address for the wireless base station.

28. A computer program product according to Claim 27, wherein the wireless base station comprises a Mobile Data Base Station (MDBS) of a Cellular Digital Packet Data (CDPD) communications system, wherein the node of the packet data communications network comprises a frame relay node of a frame relay network,
- 5 and wherein the address comprises a Data Link Connection Identifier (DLCI).

29. A computer program product according to Claim 27, wherein the packet comprises one of frame relay frame, a network layer datagram and a transport layer datagram.